#### STATEMENT OF BASIS (AI No. 90688)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0118648 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Circle "M" Ranch of Pumpkin Center, Inc.

P.O. Box 2892 Hammond, LA 70404

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)

Office of Environmental Services

Post Office Box 4313

Baton Rouge, Louisiana 70821-4313

PREPARED BY: Kelli Hamilton

DATE PREPARED: September 15, 2009

## 1. PERMIT STATUS

A. Reason For Permit Action:

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

- B. LPDES permit LPDES permit effective date: May 1, 2004 LPDES permit expiration date: April 30, 2009
- C. Date Application Received: February 23, 2009

#### 2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - alligator farm

Circle "M" Ranch of Pumpkin Center, Inc. is an existing alligator farm located in Tangipahoa Parish. The facility currently houses approximately 22,000 alligators in 25 pens/barns. Greater than 95% of the wastewater discharge is generated by flushing and cleaning of the pens/barns. Pens with hatchlings are flushed 3 times per week, and those with adults are flushed twice per week. After flushing, the pens are washed down with a bleach solution and then refilled with fresh water. This facility does not qualify as a Concentrated Aquatic Animal Production (CAAP) facility as described in 40 CFR 122, Appendix C.

#### B. FEE RATE

- 1. Fee Rating Facility Type: minor
- 2. Complexity Type: I
- 3. Wastewater Type: II
- 4. SIC code: 0279
- C. LOCATION 42102 Billville Rd. in Pumpkin Center, Tangipahoa Parish Latitude 30°27'40", Longitude 90°32'4"

## 3. OUTFALL INFORMATION

#### Outfall 001

Discharge Type: washdown wastewater from alligator pens/barns, and treated sanitary wastewater

Treatment: an aerated lagoon, manmade wetland, and contact chlorination

Location: at the point of discharge from the treatment system

Flow: 11,000 gpd

Discharge Route: unnamed canal, thence into the Natalbany River

#### 4. RECEIVING WATERS

STREAM - unnamed canal, thence into the Natalbany River

BASIN AND SEGMENT - Lake Pontchartrain Basin, Segment 040503

DESIGNATED USES - a. primary contact recreation

b. secondary contact recreation

c. propagation of fish and wildlife

#### 5. TMDL STATUS

Subsegment 040503, Natalbany River - Headwaters to Tickfaw River, is listed on LDEQ's Final 2006 303(d) List as impaired for phosphorus (EPA - Category 5), pathogen indicators, organic enrichment/low DO (EPA-Category 5), and mercury. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to an alligator farm have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Based on an evaluation of the effluent discharges, it was determined that the facility has the potential to discharge pollutants which may contribute to the phosphorus, organic enrichment/low DO, and pathogen indicators impairments of the receiving waterbody. Therefore, for the purposes of this permit, phosphorus, organic enrichment/low DO, and pathogen indicators will be addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards. CBOD5 and fecal coliform limits are placed in the permit.

LDEQ's position regarding water quality criteria for nutrients, is that when oxygen-demanding substances are controlled and limited in order to ensure

that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. See In The Matter of Sierra Club and Louisiana Environmental Network Request for Nutrient Limits. Docket No. AHD-DR-96001. LDEQ April 29, 1996. LAC 33:IX.2707.D.1.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through CBOD5 Compliance with the CBOD5 limitations as an indicator parameter will result in the control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with the permit in addition to LDEQs ambient water quality monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause located in Other Conditions of the permit allows the Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards.

#### 6. CHANGES FROM PREVIOUS PERMIT

Monitoring Frequency of Outfall 001 has been increased from quarterly to monthly.

## 7. COMPLIANCE HISTORY/COMMENTS

# A. Compliance History

Consolidated Compliance Order & Notice of Potential Penalty WE-CN-07-0017
June 3, 2008

Compliance Order & NOPP WE-CN-03-0149 was issued on August 8, 2003. It contained interim limits until an LPDES permit was issued April 15,2004. A file review conducted in February 2008, revealed that no DMRs were submitted for the months of September 2003 through March 2004. This was in violation of the compliance order. In addition to the file review in February 2008, one was conducted in May 2008. These reviews revealed that the facility failed to submit DMRs for the second quarter of 2004 and the first quarter of 2008 as required by LPDES permit LA0118648. DMRs that were submitted, were not submitted in a timely manner. The file reviews also revealed exceeded effluent limitations. In response to numerous citizens' complaints regarding foul odors, the Department conducted inspections in September 2004, October 2004, December 2004, July 2006, and August 2007. An additional inspection in December 2006 revealed that some of the aerators were inoperable.

B. DMR Review/Excursions - A DMR review was completed for July 2007 through June 2009. The excursions are as follows:

DATE	PARAMETER	OUTFALL	REPORTED VALUE		PERMIT LIMITS	
			MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM
9/07	Ammonia- Nitrogen	001	38.6	43.2	20	30
12/07	Ammonia- Nitrogen	001	34.7	34.7	20	30
	CBOD	001	40	40	25	40
3/08	TSS	001	140	140	90	135
	Ammonia- Nitrogen	001	33.4	33.4	20	30
	CBOD	001	29	29	25	40
6/08	Ammonia- Nitrogen	001	40.2	40.2	20	30
9/08	Ammonia- Nitrogen	001	31.8	31.8	20	30
	CBOD	001	40	40	25	40
12/08	Ammonia- Nitrogen	001	3,4.2	34.2	20	30
	CBOD	001	36	36	25	40
3/09	Ammonia- Nitrogen	001	24.6	24.6	20	30
	CBOD	001	34	34	25	40

# 8. EXISTING EFFLUENT LIMITS

Outfall 001 -	(mg/l)
CBOD	25:40
NH3-N	20:30
TSS	90:135
Fecal Coliform	200:400
рн	6-9

## 9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 040503 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Gulf Sturgeon and West Indian Manatee, which are listed as threatened and/or endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated 11/17/08 from Rieck (FWS) to Nolan (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Gulf Sturgeon and West Indian Manatee. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

## 10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

## 11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

## 12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

# 13. STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

An SWP3 is not required by the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain and LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC codes 0279 are not considered to have stormwater discharges associated with industrial activity.

Rationale for Circle "M" Ranch of Pumpkin Center, Inc.

1. Outfall 001 washdown wastewater from alligator pens/barns, and treated sanitary wastewater(estimated flow is 11,000 gpd)

<u>Pollutant</u>	Limitation Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow (GPD)	Report:Report	LAC 33:IX.2707.I.1.b
CBOD5	25:40	BPJ*; LAC 33:IX.5905
TSS	90:135	BPJ*; Class I Sanitary General Permit
Fecal Coliform		
colonies/100 ml	200:400	BPJ*; LAC 33:IX.1113.C
Ammonia -Nitrogen	20:30	BPJ*
pH (su)	6.0-9.0	BPJ*; LAC 33:IX.1113.C
	(min) (max)	

Treatment: an aerated lagoon, manmade wetland, and contact chlorination

Monitoring Frequency: monthly; The monitoring frequency has been increased due to violations of the previous permit.

Limits Justification: BPJ based on previous permit and similar permitted facilities. In addition, CBOD and TSS limits are based on secondary treatment standards. Fecal Coliform and pH limits are based on numerical criteria specified in LAC 33:IX.1113.C.

\* Existing permits for similar outfalls

BPJ Best Professional Judgement

su Standard Units

# NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.